

## SUMMARY OF SECTION 404 IMPACTS

Marion County  
US 68 Re-alignment  
**Item No. 4-192.20**

*For Decimal Degree coordinates please see the Jurisdictional Determination Summary Chart*

Station 71+55 See sheet R5	Construct 100 linear feet of 48 inch pipe culvert under the road. The inlet and outlet areas of the pipe culvert will have Class II channel lining and will impact an additional 82 feet. A total of approximately <b>362</b> feet of <b>intermittent</b> stream (UT to Landers Creek) will be impacted by roadway fill with redirection to 6-foot and 2-foot flat bottom ditches containing Class II and III channel lining. This impact measures <b>0.033</b> acres. The drainage area at the culvert pipe is <b>36.7 acres</b> . <b>Lat 37° 34.72'N, Long 85° 7.60'W</b>
Station 72+75 See Sheet R5	Construct the new alignment and toe of slope which will fill this <b>wetland</b> . This wetland is an old farm pond which was breeched by the farmer at some point and drained. The impact is <b>0.11 acres</b> . <b>Lat 37° 34.70'N, Long -85°7.50'W</b>
Station 75+72 See sheet R5	Construct 110 linear feet of 36 inch pipe culvert under the road. The inlet and outlet areas of the pipe culvert will have Class II channel lining and will impact an additional 50 feet. A total of approximately <b>160</b> feet of <b>intermittent</b> stream (UT to Landers Creek) will be impacted measuring <b>0.011</b> acres. The drainage area at the culvert pipe is 22.96 acres. <b>Lat 37° 34.72'N, Long 85° 7.45'W</b>
Station 80+33 See sheet R7	Construct a 148 linear feet of 42 inch pipe culvert under the road. The inlet and outlet areas of the pipe culvert will have Class II channel lining and will impact an additional 57 feet. A total of approximately <b>205</b> linear feet of <b>intermittent</b> stream channel (UT to Landers Creek) will be impacted measuring <b>0.014 acres</b> . The drainage area at the culvert pipe is 25.71 acres. <b>Lat 37° 34.72'N, Long 85° 7.35'W</b>

Station 93+30 See sheet R7	Construct 110 linear feet of 54 inch pipe culvert under the road. The inlet and outlet areas of the pipe culvert will have Class II and Class III channel lining and will impact an additional 80 feet. A total of <b>190</b> linear feet of <b>intermittent</b> stream (UT to Landers Creek) will be impacted measuring <b>0.013</b> acres. The drainage area at the culvert pipe is 67 acres. <b>Lat 37° 34.80'N, Long 85° 7.09'W</b>
Station 97+00 See Sheet R9	Construct 220 linear foot 36 inch pipe culvert which will drain a 180 X 150' pond (0.6 acres). The pond was constructed by damming an ephemeral channel that was approximately 1.0' in width. The total stream estimated to be impounded by this pond is 180' but total impacted ponded + free flowing stream = 220' length X 1.0' width = <b>0.004 acres of impact</b> . The <b>drainage area at the mouth of the pond is 5.58 acres</b> . <b>Lat 37° 34.80N, Long 85°7.02W</b>
Station 118+40 See sheet R11	Construct 338 linear feet of 6' X 6' box culvert under the road. The inlet and outlet areas of the pipe culvert will have Class IA channel lining and will impact an additional 120 feet. This new culvert replaces an existing 80 foot 6' X 6' box culvert. A total of <b>280</b> linear feet of <b>perennial</b> stream (UT to Landers Creek) will be impacted measuring <b>0.038 acres</b> with a <b>watershed size of 179 acres</b> . <b>Lat 37° 34.96'N, Long 85° 6.62'W</b>
Station 124+16 See sheet R11	Construct 85 linear feet of 30 inch pipe culvert under the road. The inlet and outlet areas of the pipe culvert will have Class II channel lining and will impact an additional 35 feet. This new culvert replaces an existing 40 foot 30 inch pipe at the same location. A total of <b>80</b> linear feet of <b>intermittent</b> stream (UT to Landers Creek) will be impacted measuring <b>0.005 acres</b> with a <b>watershed size of 10.65 acres</b> . <b>Lat 37° 34.99'N, Long 85° 6.50'W</b>
Station 130+06 See sheet R13	Construct 115 linear feet of 24 inch pipe culvert under the road. The inlet and outlet areas of the pipe culvert will have Class II channel lining and will impact an additional 35 feet. This new culvert replaces an existing 30 foot 24 inch pipe at the same location. A total of <b>120</b> linear feet of <b>ephemeral</b> stream (UT to Landers Creek) will be impacted measuring <b>0.008 acres</b> with a <b>watershed size of 6.61 acres</b> . <b>Lat 37° 35.01'N, Long 85° 6.36'W</b>

Station 140+70 See sheet R15	Construct a 90 linear feet, 4 foot flat bottom ditch. channel. A total of <b>120</b> feet of <b>intermittent</b> stream (UT to Landers Creek) will be lost, measuring <b>0.008</b> acres. The one step removal method will be used to create the new channel and it will be grass-lined. The drainage area of the stream is <b>13.64</b> acres. <b>Lat 37° 35.01'N, Long 85° 6.18'W</b>
Station 144+00 See sheet R15	Construct 128 linear feet of 36 inch pipe culvert under the entrance road. The inlet area of the pipe culvert will have 40 feet of 4 foot flat bottom ditch. A total of <b>190</b> linear feet of <b>intermittent</b> stream (UT to Landers Creek) will be impacted measuring <b>0.008 acres</b> with a <b>watershed size of 13.64 acres</b> . <b>Lat 37° 35.05'N, Long 85° 6.08'W</b>
Station 146+72.5 See sheet R15	Construct a 270' X 44' wide 3-span bridge over Landers Creek. The bridge replaces an existing 67 foot triple 12' X 10.5' box culvert. No direct impacts to the perennial stream will occur. <b>Pier 1 and Pier 2 will be set outside of the ordinary high water mark</b> and cyclopean rip-rap will be used around the abutment slopes to reduce scour during large flood events. The drainage area at the bridge is 5.27 square miles. <b>Lat 37° 35.05'N, Long 85° 6.04'W</b>
Station 150+37 See sheet R15	Construct 200 linear feet of 72 inch pipe culvert under Riley Road. This pipe culvert replaces an existing 80 foot 8' X 6' box culvert under the road. The inlet area of the pipe culvert will have 50 feet of Class III channel lining placed within a 10 foot flat bottom ditch. The outlet area of the pipe will have 150 feet of Class III channel lining placed within a 10 foot flat bottom ditch. A total of <b>400</b> linear feet of <b>intermittent</b> stream (UT to Landers Creek) will be impacted measuring <b>0.055 acres</b> with a <b>watershed size of 141.54 acres</b> . <b>Lat 37° 35.05'N, Long 85° 5.96'W</b>
Station 154+49.2 See sheet R15, 17	Construct 312 linear feet of 48 inch pipe culvert under the road. This pipe culvert replaces an existing 120 foot 4' X 3' box culvert under the road. The inlet area of the pipe culvert will have 25 feet of Class II channel lining. The outlet area of the pipe will have 20 feet of Class IA channel lining. A total of <b>260</b> linear feet of <b>intermittent</b> stream (UT to Landers Creek) will be impacted measuring <b>0.023 acres</b> with a <b>watershed size of 47.88 acres</b> . <b>Lat 37° 35.06'N, Long 85° 5.90'W</b>

## **Landers Creek Road**

Station 42+00  
See sheet R19

Construct 190 linear feet of 30 inch pipe culvert under the road. This inlet area of the pipe will have 18 feet of Class II channel lining while the outlet area will have 15 feet of Class III. A total of **230** linear feet of **intermittent** stream (UT to Landers Creek) will be impacted measuring **0.015 acres** with a **watershed size of 8.77 acres**.

**Lat 37° 35.18'N, Long 85° 5.43'W**